4x4 Matrix RMT

CAT5 to Serial

EXT-RMT-MATRIX-444 / EXT-RMT-2-CAT5

User Manual

www.gefen.com

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INTRODUCTION

Congratulations on your purchase of the 4x4 Matrix RMT and/or CAT5 to Serial. Your complete satisfaction is very important to us.

Gefen

Gefen delivers innovative, progressive computer and electronics add-on solutions that harness integration, extension, distribution, and conversion technologies. Gefen's reliable, plug-and-play products supplement cross-platform computer systems, professional audio/video environments, and HDTV systems of all sizes with hard-working solutions that are easy to implement and simple to operate.

The Gefen 4x4 Matrix RMT

The 4x4 Matrix RMT is a powerful tool that can be used with the 4x4 DVI KVM Matrix. It will allow you to remotely switch your sources. If your remote station is located in another room, you can easily switch to another source by pressing one of the four push-button switches on the 4x4 Matrix RMT. This box easily connects to the 4x4 DVI KVM by one CAT-5e cable. You can use up to four 4x4 Matrix RMT units with the 4x4 DVI KVM Matrix to have the ability to switch at all four remote workstations.

The Gefen CAT5 to Serial

The CAT5 to Serial now gives your Gefen 4x4 Matrix box the power of remote switching. The CAT5 to Serial, in conjunction with up to four 4x4 Matrix RMT units, will extend your ability to manage your sources at each remote display. It will work with any of our 4x4 matrix units listed below. Your remote switching is easily set up by using one CAT-5e cable from the 4x4 Matrix RMT to the CAT5 to Serial and then connecting the CAT5 to Serial to your matrix switcher by using a serial cable. You can now switch your sources at each display without ever having to switch locally again.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE 4X4 MATRIX RMT

• The 4x4 Matrix RMT and CAT5 to Serial units are housed in a metal box for better RF shielding.

• Industry standard Category-5 (CAT-5) cables are used to operate the 4x4 Matrix RMT and CAT5 to Serial.

• The 4x4 Matrix RMT is designed to work with the EXT-DVIKVM-444 or in conjunction with the CAT5 to Serial.

• The CAT5 to Serial, with up to four 4x4 Matrix RMT units, will work with these Gefen products.

4x4 HDTV Matrix
4x4 HDTV KVM Matrix
4x4 DVI Matrix
4x4 HDMI Matrix
4x4 Component Audio Matrix

Features

- Remote switching of sources on compatible products

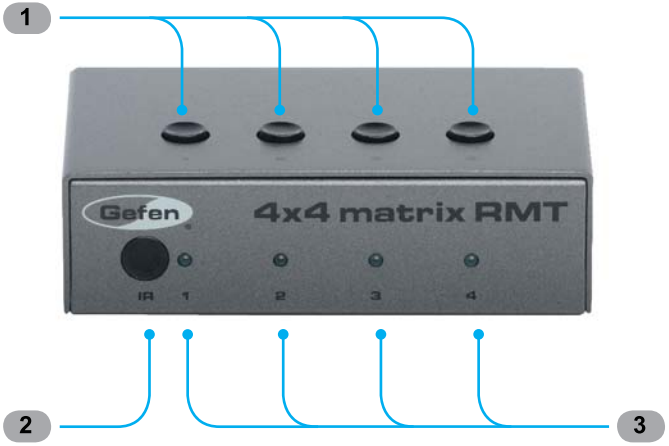
Package Includes (4x4 Matrix RMT):

(1) 4x4 Matrix RMT
(1) 10 ft. CAT-5e cable
(1) IR remote control
(1) Quick Start Guide

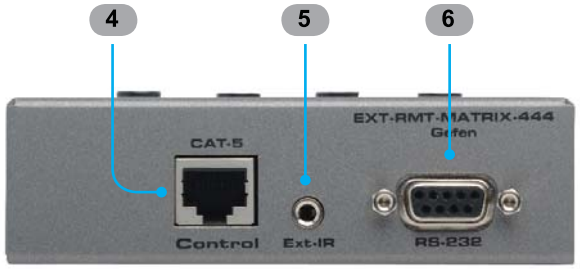
Package Includes (CAT5 to Serial):

(1) CAT5 to Serial
(1) 5V / 2A DC power supply
(1) Quick Start Guide

Top / Front Panel



Back Panel



Bottom Panel

1 ***Source Selection Buttons***
Press these buttons to switch the input on the matrix

2 ***IR***
Receives IR commands from the included IR remote

3 ***Source Indicators***
Each of these LEDs will glow bright blue to indicate the currently selected source, associated by pressing a Source Selection button (A = 1, B = 2, C = 3, and D = 4).

4 ***CAT-5 Control***
Connect a CAT-5e cable from the 4x4 Matrix RMT to the RJ-45 jack on the Matrix (see the Wiring Diagram on page 9).

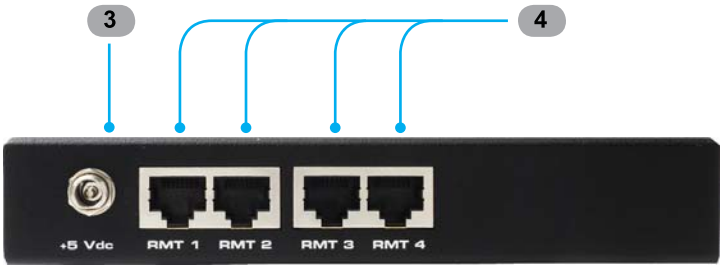
5 ***EXT-IR***
Connect an IR extender (Gefen part no. EXT-RMT-EXTIR) to this connector in order to extend the IR range of the IR remote control.

6 ***RS-232***
Connect a DB-9 cable from this serial port to the RS-232 control device. This will provide remote control switching via RS-232.

7 ***DIP Switch Bank***
See page 10 for more information.

Front Panel

Back Panel



PANEL DESCRIPTIONS - CAT5 TO SERIAL

1 RS-232

Connect an DB-9 serial cable from this serial port to a compatible Gefen product

2 Power

This LED will glow bright red when power is applied to the CAT5 to Serial unit

3 +5 Vdc

Connect the included 5V / 2A DC power supply to this power receptacle, then connect the AC power cord to an available electrical outlet.

4 RMT 1 - RMT 4

Connect CAT-5e cables from each of these RJ-45 jacks to the inputs on the 4x4 Matrix RMT.

Layout and Description

1 ***Activity Indicator***
This LED will be activated momentarily each time a button is pressed.

2 ***Display and Source Selection Buttons (1 - 4)***
These buttons are used to switch the 4x4 Matrix RMT to the selected source.

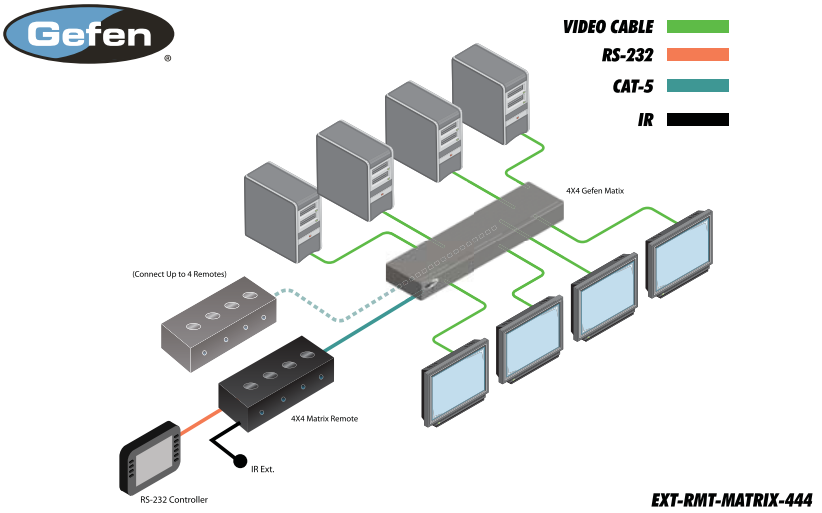
NOTE: The RMT-4IR Remote Control is only used with the 4x4 Matrix RMT.

How to Connect the 4X4 Matrix RMT

1 Connect a CAT-5e or CAT-6a cable between the 4x4 Matrix RMT and one of the CAT-5 ports on the rear of the Matrix (e.g. DVIKVM-444N). The ports are labeled as RMT A, B, C, and D and correspond with output ports 1, 2, 3, and 4.

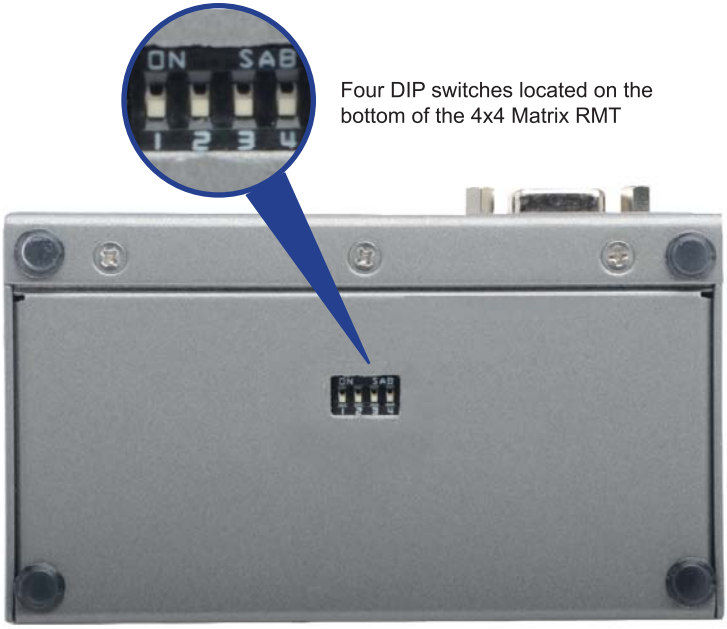
2 Use the contact buttons on the 4x4 Matrix RMT to switch between the different inputs connected to the DVIKVM-444N. Switches A, B, C, and D correspond to sources 1, 2, 3, and 4. Optionally, you can use a RMT-4IR (infrared remote) in conjunction with the 4x4 Matrix RMT to switch inputs from a distance.

Wiring Diagram for the 4x4 Matrix RMT



DIP Switches

The Gefen 4x4 Matrix RMT contains four (4) DIP switches on the bottom of the unit. Only DIP switch 4 is functional. DIP switch 1 - 3 are reserved for future use.



Four DIP switches located on the bottom of the 4x4 Matrix RMT

DIP Switch 4 - Toggle RS-232 Feedback (Default = OFF)

- ***ON*** - Disable feedback

  Device feedback is disabled. Set DIP switch 4 to the ON position when feedback from the device being controlled (e.g. Gefen part no. EXT-DVI-441DL) should be ignored. This is particularly useful if unusually long switching delays occur between the RS-232 device and the 4x4 Matrix RMT.

- ***OFF*** - Enable feedback

  Device feedback is enabled. Set DIP switch 4 to the OFF position when feedback is desired or when using products such as the Gefen 4x4 Matrix Switcher.

How to Connect the CAT5 to Serial

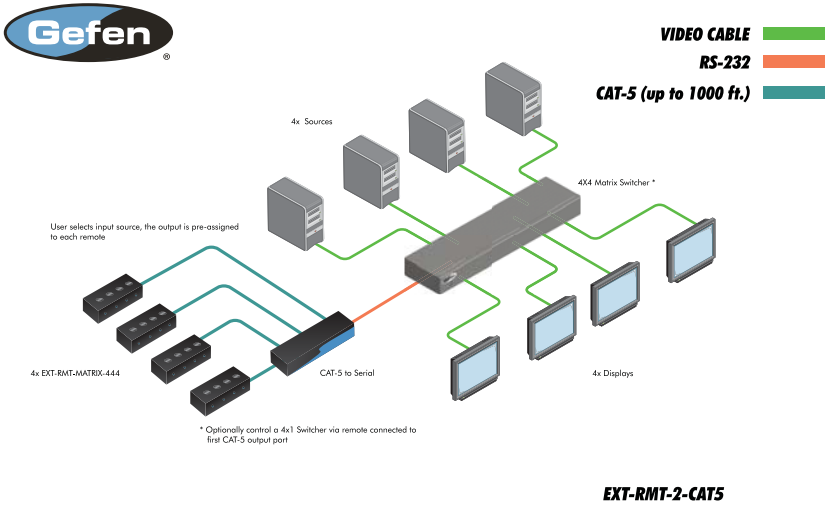
1 Connect a CAT-5 or CAT-6 cable between the 4x4 Matrix RMT and one of the CAT5 ports on the rear of the CAT5 to Serial. The ports are labeled as RMT 1, 2, 3, and 4, which correspond with the display outputs on the Matrix.

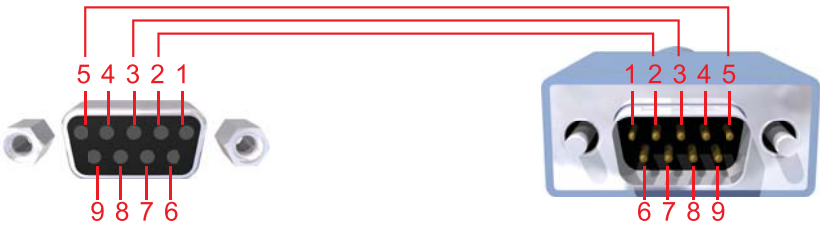
2 Connect a serial cable (must not be a null modem serial cable) between the CAT5 to Serial and the compatible Gefen matrix product.

3 Use the contact buttons on the 4x4 Matrix RMT to switch between the different inputs connected to the compatible Gefen matrix product. Switches A, B, C, and D correspond to sources 1, 2, 3, and 4 on any of our matrix units.

Optionally, you can use an IR remote (Gefen part no. RMT-4IR) in conjunction with the 4x4 Matrix RMT to switch inputs from a distance.

Wiring Diagram for the CAT5 to Serial


VIDEO CABLE
RS-232
CAT-5 (up to 1000 ft.)
4x Sources
4X4 Matrix Switcher *
User selects input source, the output is pre-assigned to each remote
4x EXT-RMT-MATRIX-444
CAT-5 to Serial
4x Displays
* Optionally control a 4x1 Switcher via remote connected to first CAT-5 output port
EXT-RMT-2-CAT5



Only Pins 2 (RX), 3 (TX), and 5 (Ground) are used on the RS-232 serial interface

RS232 Settings

Bits per second 19200

Data bits 8

Parity ..... None

Stop bits 1

Flow Control ..... None

Binary Table

ASCII	Display/ Source	Binary		ASCII	Display / Source	Binary
1	1/1	0011 0001		9	3/1	0011 1001
2	1/2	0011 0010		A	3/2	0110 0001
3	1/3	0011 0011		B	3/3	0110 0010
4	1/4	0011 0100		C	3/4	0110 0011
5	2/1	0011 0101		D	4/1	0110 0100
6	2/2	0011 0110		E	4/2	0110 0101
7	2/3	0011 0111		F	4/3	0110 0110
8	2/4	0011 1000		G	4/4	0110 0111

SPECIFICATIONS

RF Band..... 2.4 GHz

RS-232 Sender unit.....DB-9, female

RS-232 Receiver unit.....DB-9, female

Power Supply.....5V DC, Locking (Sender unit / Receiver unit)

Power Consumption.....100mW (max.)

Dimensions (W x H x D).....1.2” x 1.2” x 3.8” (30.5mm x 30.5mm x 96.5mm)

Shipping Weight.....2 lbs. (0.9 kg)

WARRANTY

Gefen warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.

2. Customers outside the US are responsible for shipping charges to and from Gefen.

3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the features and specifications is subject to change without notice.

For the latest warranty coverage information, refer to the Warranty and Return Policy under the Support section of the Gefen Web site at www.gefen.com.

PRODUCT REGISTRATION

Please register your product online by visiting the Register Product page under the Support section of the Gefen Web site.

Rev A3

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This product uses UL or CE listed power supplies.